



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

P

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,191	09/10/2003	Hiroyuki Miyoshi	9369-93US (T37-160686M/AI)	5611
570	7590	05/30/2006	EXAMINER	
AKIN GUMP STRAUSS HAUER & FELD L.L.P. ONE COMMERCE SQUARE 2005 MARKET STREET, SUITE 2200 PHILADELPHIA, PA 19103			MATTHEWS, TERRELL HOWARD	
			ART UNIT	PAPER NUMBER
			3654	

DATE MAILED: 05/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/659,191

Applicant(s)

MIYOSHI, HIROYUKI

Examiner

Terrell H. Matthews

Art Unit

3654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5/10/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. More specifically, it is unclear as to what qualifies as "plate-like" in structure.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8,10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hakala (US-5783895) in view of Nagata (US-6851520).

Referring to claims 1-3. Hakala discloses an "Elevator Motor With Flat Construction". See Figs. 1-6 and respective portions of the specification. Hakala further discloses a plate-like fixed member (6); a sheave body (4) pivotally supported by the

fixed member, around which a rope connected to a cage of the elevator is wound; a drive motor (2) supported by the fixed member, for rotating the sheave body when the drive motor gives driving torque to the shave body; and a brake device (3) for giving braking force to the sheave body, attached to the fixed member so as to be arranged outside the sheave body in a radial direction of the sheave body (See at least Fig. 1); wherein a cutout portion formed in an outer periphery of the fixed member (See at least Fig. 1). Hakala does not disclose wherein a part of the brake device is accommodated in the cutout portion. Nagata discloses a "Hoisting Machine Having Brake Device". See Figs. 1- 2B. Nagata further discloses an elevating drive apparatus (43) comprising a plate-like fixed member (44); a sheave body (51); a drive motor (52) and a brake device (56). Nagata further discloses wherein a cutout portion is formed in an outer periphery of the fixed member (46) and a part of the brake device is accommodated in the cutout portion (See at least Fig. 1A). Furthermore, Nagata discloses wherein end portions of the brake device are fastened to protrusions of the fixed member respectively formed on both sides of the cutout portion and arranged on a common plane perpendicular to a driving axis of the elevating drive apparatus (See at least Figs. 1A-1B). It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the apparatus of Hakala to include the teachings of Nagata and include a cutout portion that could accommodate the brake device so that space could be saved, which would help shorten the length of the elevating device making it easier to install and useful in more environments with space limitations.

Referring to claims 4-7,10-11. Hakala does not disclose a brake disk so as to be extended in a radial direction with respect to a driving axis of the elevating drive apparatus, wherein at least one brake shoe provided in the brake device is pressed to a side surface of the brake disk for providing the braking force to the sheave body. Nagata discloses a brake disk (53) so as to be extended in a radial direction with respect to a driving axis of the elevating drive apparatus, wherein at least one brake shoe provided in the brake device is pressed to a side surface of the brake disk for providing braking force to the sheave body (See at least Col. 5 l. 49-52 & at least Fig. 1a). Additionally, Nagata discloses wherein at least one pair of brake shoes is provided in the brake device and the brake disk is clamped on opposite sides thereof for providing the braking force to the sheave body (See at least Fig. 1A). Furthermore, Nagata discloses wherein the brake disk is contiguous to the sheave body so that the sheave body and brake disk integrally rotates (See at least Col 3 l. 60 – Col. 4 l. 9 & at least Fig. 1A). Nagata discloses as well that wherein the brake disk (53) is provided between the sheave body (51) and the fixed member in the axial direction and that at least one brake shoe is provided on a side where the fixed member is provided with respect to the brake disk (See at least Col. 3 l. 62 – Col. 4 l. 9 & at least Fig. 1A) It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the apparatus of Hakala to include the teachings of Nagata and include brake device that when was pressed into the side surface of the brake disk would provide a braking force so that the elevator during transportation could be slowed and stopped in an easy and effective manner whenever necessary.

Referring to claim 8. Hakala discloses a support member (25) protruding from the fixed member (6) and rotationally supporting the sheave body, wherein a stator (9) of the drive motor is disposed in a space (19B) defined in the support member (See at least Col. 3 l. 45-49 & at least Fig. 3).

Referring to claim 12. Hakala discloses wherein the brake disk (3) is fixed to the sheave body (4) so as to be contiguous to each other by fixing parts (See at least Figs. 1-2). It should be noted that it is generally known in the field of the art to have the brake disk fixed to the sheave body. Additionally, it should also be noted that Nagata discloses wherein the brake disk (53) is fixed to the sheave body (51) so as to be contiguous to each other by fixing parts (See at least Col. 3 l. 62 – Col. 4 l. 9 & at least Fig. 1A).

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hakala in view of Nagata as applied to claims 1-8 as advanced above in further view of Aulanko (US-5899301).

Referring to claim 9. Hakala does not disclose wherein a width of the brake device is smaller than an outer diameter of the sheave body. Aulanko discloses "Elevator Machinery". See Figs. 1-7 and respective portions of the specification. Aulanko further discloses a drive motor (2), brake device (3), and sheave (4). Aulanko further discloses that the width of the brake device (3) is smaller than the outer diameter of the sheave body (4) (See at least Fig. 1). It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the apparatus of Hakala to include the teachings of Aulanko so that the brake device had a width less than that of

the sheave body so that space could be saved which would make it easier for installation and useful in environments with space limitations.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Eckersley (US-4739969) discloses a "Lift Sheave" comprising a sheave body (11), motor (21), brake shoes (50), and a clamp device (60).

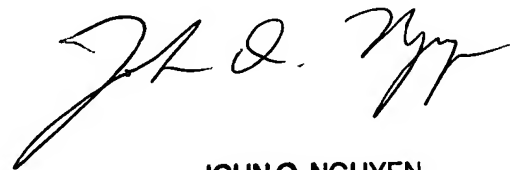
Bauer (US-6742628) discloses a "Rope Elevator" comprising a traction sheave (13), motor (14), support member (15), and a mounting plate (15.1) with a cutout (21).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terrell H. Matthews whose telephone number is (571)272-5929. The examiner can normally be reached on M-F 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki can be reached on (571) 272-6951. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

THM

A handwritten signature in black ink, appearing to read "J. Q. Nguyen", with a stylized flourish at the end.

**JOHN Q. NGUYEN
PRIMARY EXAMINER**